

ABSTRACT OF THE DISCLOSURE

According to an encapsulating production method by the background art, encapsulation target ions obtained by ionizing encapsulation target atoms have been irradiated to empty fullerene within a vacuum vessel. This has resulted in a problem of a lower formation efficiency of encapsulating-fullerene, in case of forming encapsulating-fullerene which encapsulates an atom larger than a six-membered ring of fullerene. It is thus devised to irradiate ions having larger diameters and masses to a fullerene film, simultaneously with irradiation of encapsulating ions thereto. Since ions having larger masses collide with fullerene molecules, the fullerene molecules are largely deformed and openings thereof are enlarged. Encapsulating ions are caused to enter cages of fullerene molecules, thereby increasing a probability of formation of encapsulating-fullerene.